PEOPLE FOR PUGET SOUND

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Lacey, WA

May 18, 2006

Re: Draft Phase I and Phase II Stormwater General Permits

Dear Bill:

Thank you for the opportunity to comment on the Draft Phase I and II permits. This issue is of particular importance to People for Puget Sound.

People For Puget Sound is a nonprofit, citizens' organization whose mission is to protect and restore Puget Sound and the Northwest Straits, including a specific goal to protect and restore the 2,000 miles of Puget Sound shoreline by 2015.

As you are aware, there is now a large body of evidence that indicates that pollution and hydrologic impacts from stormwater is perhaps the greatest single threat to the Puget Sound ecosystem. Sediment monitoring conducted by Ecology over the past few years indicates that PAH, phthalates, PCBs, and other contaminants linked to stormwater discharges are a major and growing problem. These results further underscore the importance of moving forward on strong permits.

While we are pleased that the Department is moving towards adoption of new permits, we are very disappointed with the scope of the permits and the general failure of these permits to set the state on a trajectory to address stormwater impacts in a reasonable timeframe.

There is very little relationship between the content of these draft permits and the Governor's stated goal of cleaning up Puget Sound by 2020. From our standpoint, the administration could do nothing more important to achieve this goal than develop strengthened stormwater permits in 2006.

In addition, there is little or no correlation between this permit and the steps needed to recover species like salmon and orca whales listed under the Endangered Species Act. Stormwater impacts have been noted over and over by researchers as perhaps the most important problem facing these species. Sadly, the timeline for making real adjustments which correct water quality and hydrologic problems is, under the terms of these draft permits, measured in decades as opposed to years. Given the dwindling populations of these species, this timeframe is unacceptable.

The Phase I permit was first adopted in 1995 and should have been updated in 2000. The Phase II permit is now almost three years overdue, the state having missed the EPA deadline for permit adoption. The permits, by Ecology's own admission, do not contain adequate requirements to address water quality problems. In the case of the

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Phase I permit, requirements largely mirror programs that are already in place. Moreover, a number of Phase I jurisdictions have already implemented programs which far exceed the requirements of this permit. The Phase II requirements and timelines for program development are extremely modest. They bear no relationship to the urgency of correcting these problems.

We share the concerns raised by Puget Soundkeeper Alliance and Smith and Lowney in their comment letter and will not restate many of the issues that they have already identified as needing to be corrected. We also share concerns raised by U.S Fish and Wildlife Service in their comments on the pre-draft permit, all of which, as far as we can tell, are still relevant to this draft. Given the overlap in many areas, our comments on Phase II permits will often simply reference similar concerns raised in the Phase I comments.

I. Phase I Permit

The Phase I permit is, again, a renewal of a permit first issued in 1995. It is long overdue and should reflect advances in our understanding of stormwater impacts as well provide a framework to significantly advance work already underway in these jurisdictions. The permit should be written to require development of programs which are designed to meet state and federal legal requirements, including attainment of water quality standards. Unfortunately this draft permit does not achieve those goals.

1. Failure to Adequately Address Land Use Matters

The permit does not require controls on land use practices which are widely regarded by scientists and planners as the key to controlling stormwater pollution. In particular, we feel that the permit should, at a minimum, require basin planning and the development of LID ordinances.

The permit instead relies heavily on the Stormwater Manual for Western Washington and BMP strategy which is not geared toward prevention of these problems through limiting impervious surfaces and retention of forested cover. On page 14 of its *Review of Stormwater Management Manual for Western Washington (August 2001*), the Independent Science Panel concluded the following:

> "We conclude that the levels of impervious surfaces at which degradation begins to occur seem to preclude dramatic improvement in salmon habitat resulting solely form the actions required by the manual. Also, by themselves, water quality requirements of the manual are not likely to restore conditions needed for expansion of salmonids in western Washington. Ecology also acknowledged these issues, noting that:
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> > 'Ecology understands that despite the application of appropriate practices and technologies identified in the manual, some degradation of urban and suburban receiving waters will continue and some beneficial uses will continue to be impaired or lost due to new development. This is because land development, as practiced today, is incompatible with the achievement of sustainable ecosystems.'
>
> We emphasize our primary recommendation that stormwater management and land use planning be integrated and coordinated through watershed-scale planning, assessments, monitoring, and adaptive management.

Unfortunately, the Department has chosen to ignore this advice in crafting the Phase I stormwater permit. While the permit does touch on these subjects in S(5)(C)6 (Structural Stormwater Controls) the language is vague and permissive. In the Draft Fact Sheet, page 32, the Department admits that while "comprehensive land use plans that consider the hydrologic and pollutant impacts of potential land development on aquatic resources" should be more fully addressed, it is "beyond the scope of this permit." Instead, the Department takes, according to the Fact Sheet, a "generic presumptive approach" allowing permittees to choose from the menu of BMP's in the manual in the hope that this will "generally result in compliance" with water quality standards and other requirements. What is the

scientific basis for this conclusion? Is it correct to assume that the term "general compliance" indicates that the programs will not be fully compliant with statutory requirements under this approach?

The Department should require in this permit that Phase I jurisdictions implement basin planning programs. These programs should be conducted on a sub-basin scale and should be designed to identify opportunities to prevent stormwater problems as well as identify and correct existing problems. In short, the basin plans should identify existing and future development and model stormwater impacts from such development. Such information should be used to correct existing problems and guide future land use development. The plans could also be used to prioritize habitat acquisition, capital improvement projects, and mitigation strategies.

The state Growth Management Act recognizes the need to achieve water quality goals in developing land use plans and regulations, yet few jurisdictions have made that linkage. This permit offers an opportunity for the state to "connect the dots."

Given that King County, Pierce County, and others have begun to conduct basin planning of this sort, why is this approach not incorporated in the permit, given the requirement for Ecology to utilize AKART under RCW 90.48? How is it that the approach outlined in the permit is considered MEP given that these jurisdictions have undertaken such work? In the Fact Sheet, page 34, the Department concludes that source control requirements are both "reasonable and practical based on the observation that they are already being implemented by two of the Phase I permittees covered by this permit." How is it that this reasoning does not apply to basin planning?

Similarly, while we appreciate the reference in Sections S5(C)(5)(b)iii on eliminating barriers to low impact development or LID, the permits do not require LID. We believe that the permit should require the development of ordinances that require the utilization of LID strategies. Again, we believe this approach is critical for success and necessary to meet water quality objectives in state and federal law. We also believe that this approach is necessary to meet AKART and MEP requirements for the reasons stated above.

2. Failure to Require Adequate Regional Monitoring of Stormwater

We strongly support new requirements for monitoring. Monitoring data is critical if we are to make improvements in programs over time. While the language in S(8) is a step forward, we think it falls short of what is required for a successful program.

The failure to require receiving water monitoring (clearly articulated on p. 48 of the Draft Fact Sheet) is very disappointing. We believe that this information is critical and, while we acknowledge that the state should contribute resources, local jurisdictions have an obligation to help pay for such work.

Moreover, we are convinced that minimal number of monitoring stations, the infrequency of monitoring, and the ability of local jurisdictions to select monitoring sites for both BMP and end of pipe monitoring will not produce adequate data to determine how to improve BMP's or adjust local stormwater programs.

The framework for monitoring needs to be spelled out in greater detail and that jurisdictions or, preferably, a central regional authority should submit monitoring plans to Ecology for approval. While we appreciate the inclusion of QAPP's in S(8), it is also critical that Ecology adopt monitoring protocols to insure consistency.

Finally, we are convinced that the only way that we will achieve useful data is through the establishment of a comprehensive centralized regional monitoring system. This system must include Phase I and

Phase II jurisdictions. While the permit encourages regional cooperation of this sort, it does not require such coordination. Nor does it call for the use of standardized protocols or establish a regional entity to collect and house all the data.

Although Puget Sound researchers have put together a conceptual model of pollution movement into and within the Sound, scientists do not have a good handle on a critical piece of the puzzle – pollution loading. Ambient and focused sediment and water quality sampling shows that we continue to have significant loads of pollutants entering the system, especially toxic contamination. Animals at higher tropic levels on the food web, such as harbor seals, orca and osprey, are under threat due to toxic chemical contamination including PCBs and flame retardants (PBDEs). PBDEs, PAHs, phthalates and metals are carried into the system in urban runoff and stormwater. These pollutants come from human activities related to automobiles, residences, and businesses. It is critical, therefore, that high quality and adequate monitoring for toxic contaminants be included in the new stormwater permit.

Monitoring needs. The older stormwater monitoring approach relying solely on measuring land use types and adding up the amount of each land type to determine loads for watersheds (for instance, agricultural lands) doesn't work well when there is a significant variety of land uses within urbanized areas. Stormwater monitoring plans must include a large emphasis on receiving waters. We recommend that a minimal sampling plan includes wet weather sampling of key points within watersheds, including tributaries (i.e., creeks that run through urbanized areas), and at the bottom of the system where it enters Puget Sound or a major creek or river. The monitoring should also include bioassessments of the freshwater portions and monitoring of the benthic community at the mouths of major systems where they enter Puget Sound or the marine environment and toxicity testing of water and sediment.

We strongly support the addition of pthalates, copper, zinc, and other metals in this draft. These are toxic pollutants which are associated with stormwater and known to have serious impacts on the ecosystem. Additional contaminants should be included based on PSAMP results to ensure that the receiving waterbody biota data (i.e., Puget Sound aquatic species) matches up with the proposed stormwater sampling. For example, priority pollutants should be analyzed in stormwater during the same time frame as adjacent sampling for priority pollutants are monitored in Puget Sound through PSAMP. Monitoring should be adaptive and reflect new information gained as the monitoring program advances. Flexibility needs to be written into the permit so that if an emerging chemical shows up as a problem, then those chemicals would become part of the regular monitoring suite.

In some watersheds, a snapshot approach should be taken in which the entire watershed (key input locations) are sampled simultaneously. This approach helps provide high quality data for watershed water quality modeling.

Monitoring should be designed to determine the following questions:

- Is stormwater the source of contamination for each constituent of interest (as opposed to say, aerial deposition)?
- How do stormwater inputs vary over time?
- What are the sources of contamination within the watershed?

Structure. Regional and coordinated monitoring should be incentivized by Ecology. Rather than separate monitoring efforts by all of the different jurisdictions, a coordinated program based on a model such as Southern California Coastal Water Research Project (SCCWRP) should be encouraged for Puget Sound. Our conversations with a number of jurisdictions on this topic indicate that a number of jurisdictions see the value in a regional approach and recognize how it could greatly improve the efficiency of monitoring efforts and save money.

This new entity should coordinate their sampling with existing and new PSAMP monitoring so we can more quickly begin to answer the key stormwater questions described above and reduce the highest priority toxic and other contamination to Puget Sound. A coordinated effort by one entity (funded by the stormwater permit jurisdictions as well as EPA, Ecology and other agencies) could involve using one laboratory and framework for Puget Sound monitoring. The advantages to having one entity in place is that the individual staff from each jurisdiction would not have to get "up to speed" on all of the latest technology and advances in sampling techniques and staff FTYs could be reduced at each jurisdiction. We suggest that this entity perform both baseline sampling and research-oriented sampling (i.e., what types of pollution are produced by each type of landuse). The entity would need to determine the most appropriate method for baseline sampling (systematic versus probability-based, for example) for the Puget Sound region.

Alternatively, a model stormwater program was developed by SCCWRP for Southern California called "Model Stormwater Monitoring for Municipal Separate Stormwater Systems in Southern California" (http://www.sccwrp.org/tools/stormwater.html). This model has three components: Monitoring Design, Laboratory manual, and Information Management. Applying this model to Puget Sound would involve individual monitoring by each jurisdiction but in a highly coordinated overall program. Key activities would include timing of monitoring, choice of parameters, laboratory intercalibration studies, and data management coordination.

Western Washington can do it right. Because stormwater monitoring is at its infancy, we can build a region-wide program that will be cost effective and provide high quality data to help reverse the decline of the health of Puget Sound.

3. No Clear Strategy to Attain Water Quality Standards

We appreciate the new language in S(4) regarding the need to attain water quality standards under RCW 90.48.520. We are concerned, however, that, despite this, the permit does not lay out a strategy for achieving this goal in a time certain. In fact, quite the opposite.

The Draft Fact Sheet states, on page 23, that the "permitting strategy for municipal stormwater discharges covered under this permit" is to "evolve towards eventual compliance with water quality standards through successive permit cycles." On page 26 of the Fact Sheet, Ecology "acknowledges that it may take decades or longer" to achieve these goals. How is this consistent with the requirements to attain water quality standards in S(4)?

Again, this underscores the need to include land use strategies identified above and a clearly defined mechanism for adaptive management

4. No Clear Strategy for Adaptive Management

As referenced above, the permit should outline a clear adaptive management process which requires upgrading controls and prevention measures if monitoring data indicates that such adjustments are necessary. The idea that such adjustments will be done in subsequent permit cycles is not acceptable, especially given the delays in issuing the current permits. This program should be linked to monitoring data.

We would recommend that, at a minimum, after two years of monitoring data has been collected, the permit should require that the SWMP be reviewed and updated based on the results of monitoring and other information gathered during this period. Ecology should review these updates and there should

be an opportunity for public review and comment. Clearly, in order to be most effective, this approach is dependent on an expanded monitoring program as outlined in #2 above.

5. Education

While we appreciate the effort Ecology has taken to address concerns we raised in our last comment letter to ensure that educational programs be designed in line with "social market" techniques, we note that the language in the current draft, in S(5)(C)10, are still quite vague. In conversations with local jurisdictions, we find that there is agreement that this element would benefit from a regional approach. There is no reason for each jurisdiction to "reinvent the wheel" here. Market research should be conducted on a broader level and shared by all. We particularly appreciate language on LID education geared toward engineers, contractors, and similar professionals.

6. The Need for WRIA-wide SWMPs

For many of the reasons listed above, there is a need to better coordinate and regionalize SWMPs. While the permit encourages this coordination, it should mandate this approach. Stormwater problems do not respect jurisdictional boundaries---the only way to get a handle on these issues is through a regional, watershed approach. As stated above, this approach has the added benefit of creating efficiency and saving money.

While the Phase I permit does in S(5)(C)3 require coordination among Phase I jurisdictions, the language is somewhat vague with references to "avoiding conflicts" and "clarifying roles and responsibilities." This type of "coordination" is far different than requirements for a WRIA level approach. Among other things, there is no similar requirement on Phase II jurisdictions, let alone those jurisdictions outside of Phase I and II, to participate in this approach. Again while we appreciate the general direction and emphasis on coordination found in the Phase I permit (particularly in regard to regional monitoring), the permit should go further and spell out how this work is to be done.

7. Addressing Existing Problems, Retrofitting, and Maintaining Existing Systems

We appreciate the inclusion of a program to address stormwater impacts associated with existing development, including S(5)(C)6 on structural stormwater controls and in other areas of the permit. Since many jurisdictions in the Puget Sound region have such large problems with existing development, however, more attention is needed to these problems if we hope to achieve water quality goals.

Our concern is that the requirements in the sections which deal with existing problems are generally vague and there is no clearly defined means for adaptive management. In subsection (C)6 the program is limited to impacts which are "not adequately controlled" by the other required actions of the SWMP. It would seem as though the definition of "adequate" would be left to the applicant. It should be made clear that this term includes compliance with water quality standards in addition to hydrological impacts effecting listed species. The permit language should set clear performance standards rather than allow permittees to define the "goals that the Structural Stormwater Control Program are intended to achieve." S(5)(C)(6)(b)ii. We also feel that this is a section that would benefit greatly from a clear adaptive management system along the lines of what is discussed above.

Similarly, S(5)(C)(7) on source control programs for existing development is quite vague. For example, it simply states that operational source control BMPs should be used unless "determined to be not effective" in which case structural controls are required. The section notes that "if necessary" treatment BMP's to address existing pollution generating sources. How this evaluation will be done is left, to a large extent, to the permittee. Worse still, this section allows permittees to rely on BMP's outlined in

the Manual as their sole documentation of whether the BMP's are meeting water quality objectives, despite the fact that these BMP's have not gone through formal field tests in many cases and the fact that it is well understood that these determinations should, ideally, be done on a site-specific basis. The very modest BMP effectiveness monitoring program outlined in S(8)(C), while useful, does not give us confidence that this approach will work. A larger scale, coordinated field testing program is needed to evaluate BMP effectiveness. Site specific concerns also need to be evaluated over time.

8. Extended Timelines

Timelines are, in many case, set too far into the future. The Soundkeeper / Smith and Lowney comments identify many examples of this problem. We share their concerns and concur with their suggested modifications to the draft permit.

9. Failure to Review Programs

This permit is a departure from the last Phase I permit in that it does not require review and approval of SWMPs. While the Department has provided more detailed requirements in this draft permit than in the last permit, as noted above, they still remain quite vague in many areas. This broad delegation will make achieving the stated outcomes for the permit much more challenging.

II. Phase II Permit

While we recognize that this is a new permit and requires creation of new programs for Phase II entities, we also recognize that most have existing stormwater programs in place and that this permit is almost three years overdue. For these reasons we would argue that the permit should be ramped up and better integrated with some of the requirements in the Phase I permit. Strict adherence to the federal "minimum standards" for Phase II permit is also a problem and will make the integration of Phase I and Phase II programs more challenging in the long term.

1. Geographic Coverage of the Phase II Permit

Despite evidence of widespread problems with stormwater throughout western Washington, the Department has chosen to limit the geographic scope of the Phase II permit to a program which is near the federal minimum level. While we appreciate the fact that the program will cover Urban Growth Areas in the jurisdictions identified and that a few "bubble" jurisdictions have been added, there is a need to broaden the geographic coverage of the permit if we are to have any hope of achieving water quality objectives over time. In many ways, slower growing counties and rural areas provide better opportunities to address problems in that it is still possible to prevent impacts in these regions, to put in place good strategies before the damage is done.

2. Timelines

While we have concerns with the timelines in the Phase I permit, the Phase II permit has even more serious problems in terms of delayed action. Again, we support the comments in the Puget Sound Keeper / Smith and Lowney letter on these items.

3. Failure to Review Programs

As with the Phase I permit, we are concerned by the lack of review of SWMPs. The Phase I jurisdictions have programs in place which have been reviewed and approved by Ecology. There is some sense that these jurisdictions will meet and, in some cases, exceed the requirements of the Phase I

permit. This, obviously, is not the case when it comes to Phase II jurisdictions. There is a greater need to review and approve at least elements of the program. In absence of a review process, the permit terms should be made more prescriptive. Unfortunately, this permit contains many vague standards and allows tremendous discretion, which causes us to question whether the programs will achieve water quality and other objectives in a timely fashion. We consider this approach tantamount to the "impermissible self-regulation" that was overturned by the court in *Environmental Defense Center v. EPA*, 344 F.3d. 832 (9th Circuit 2003).

4. Require Monitoring during the Term of the Permit

As mentioned in the Phase I comments above, it is critical that an intensive regional monitoring program be established and that both Phase I and II permittees have an obligation to participate or help fund such an effort. The failure of this permit to require monitoring during the term of the permit comes close to derailing such an approach and is a fatal flaw in the permit. Section S(8). Even if we are to accept that this permit would be renewed in five years (which is a leap of faith on our part), we would not have data for several more years following that. Without this data, the information gathered by the Phase I jurisdictions is less useful and it is very difficult to do adaptive management for all these programs. This approach could set back program improvements by a minimum of 10 years. Given the serious impacts of stormwater, this approach is unacceptable.

The Phase II permit should, at a minimum, call on jurisdictions to begin monitoring during this permit cycle and should direct these jurisdictions to participate in a cooperative process to establish a regional monitoring program.

We do not understand how a monitoring program can be considered both MEP and AKART for Phase I permittees but not for Phase II permittees.

5. 1 Acre Development Threshold for Stormwater Control

This permit diverges from requirements in the Phase I permit and from the Western Washington Stormwater Manual itself in terms of allowing Phase II jurisdictions to exempt all development under 1 acre from the stormwater treatment and flow control requirements. S(5)(C)4. The impacts of such an approach would be significant. This approach is is unacceptable.

What is the scientific basis for diverging from the Stormwater Manual on this matter? How does this represent MEP or AKART, given that Phase I jurisdictions are expected to meet the standard in the Manual?

6. Lack of Land Use Controls

Again, the regulation of land use activities are critical in order to meet stated water quality objectives. See Comments on Phase I permit above. While we appreciate the reference to removal of LID barriers in S(5)(C)(4)(a)iv, the permit contains little else on this topic. While the structural controls section of the Phase I permit touches on the need for basin planning and examination of issues such as acquisition of habitat, buffers, and other controls, there is no similar requirement in this permit. This is a major flaw which will greatly limit the effectiveness of these programs.

7. Lack of Requirements for Existing Development

As mentioned above, unlike the Phase I permit, there is no requirement to consider retrofits or other means of mitigating the impacts of existing development in this permit.

Again, this is a huge gap that will greatly decrease the effectiveness of this program. We urge the Department to include a section similar to S(5)(C)6 in the Phase I permit.

8. Water Quality Standards

See the discussion of compliance with water quality standards in I(3) above.

9. No Requirements for Adaptive Management

See the discussion of adaptive management in I(4) above.

10. No Requirement for WRIA based SWMPs

As mentioned in the Phase I comments above, it is critical that SWMPs be developed or at a minimum, coordinated on a watershed basis. Unlike the Phase I permit which requires some level of coordination, this permit does not have requirements to coordinate with other jurisdictions, let alone require watershed based programs. For the reasons articulated in I(6) above, the permit should be revised to require this approach.

Thank you for reviewing our comments. Please contact us if you have questions regarding these matters. We look forward to working with the Department and with stakeholders on any revisions to the draft permit.

Yours,

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People for Puget Sound